WMS052

WMS057
WMS058
WMS060

WMS063

WMS Primer Right

Length (h)

Annealing Repeat Type Temperature

WMS108

WMS106 WMS107

WMS099

WMS095

880SWW

WMS071

WMS067 WMS068 WMS070

WMS082

ELISMA

WMS114

WMS119

811SWA

1/1/2 Cen

,

. . .

WMS224	WMS219	WMS218	WMS213	WMS212	WMS210	WMS205	WMS203	WMS200	861SWM	WMS197	WMS195	WMS194	WMS193	WMS192	MWS191	WMS190	WMS189	981SWM	WMS182	WMS181	081SWM	WM5179	WMS174	WMS169	WMS165	WMSIGA	WMSIG3
S' TGA GTC CAG CAC TGC TGC 3'	5' DAT GAG CGA CAC CTA GCC TC 3'	5' CGG CAA ACG GAT ATC GAC 3'	5' TGC CTG GCT CGT TCT ATC TC 3'	5' AAG CAA CAT TTG CTG CAA TG 3'	5' TOC ATC AAO AAT AGT GTG GAA G 3'	S' CGA CCC GGT TCA CTT CAG 3'	5' CCC AÁA GCA GCG CAA GC 3'	5' TCA ACG GAA CAG ATG AGC G 3'	5' TTG AAC CGG AAG GAG TAC AG 3'	5' GAG AAA GAG OTC TOG AGG TCG 3'	5' AGG TGC CGT CGC GTC TAC 3'	S' GAT CTG CTC TAC TCT CCT CC 3'	S' CIT TGI GCA CCT CTC TCT CC 3'	5' GGT TTT CTT TCA GAT TGC GC 3'	S' AGA CTG TTG TTT GCG GGC 3'	S' GTG CTT GCT GAG CTA TGA GTC 3'	5' AGG AGC AGC GGA ACG AAC 3'	5' GCA GAG CCT GGT TCA AAA AG 3'	S' TGA TGT AGT GAG CCC ATA GGC 3'	S' TCA TTG GTA ATG AGG AGA GA 3'	S' ATC COC CTA AGG AAT AGT GT J'	S AAG TTG AGT TGA TGC 0G0 AG J'	S' GOG TTC CTA TCT GGT AAA TCC C 3'	5' ACC ACT GCA GAG AAC ACA TAC G 3'(SEQ	S' TGC AGT GGT CAG ATG TTT CC 3'	5' ACA TIT CTC CCC CAT CGT C 3'	5' ACC TCG ACA GAC CTG GTA CG 3'
(SEQ. ID NO. 161)	(SEQ. ID NO. 159)	. ID NO.	(SEQ. ID NO. 155)	(SEQ. ID NO. 153)	(SEQ. ID NO.	ID NO.	(SEQ. ID NO. 147)	(SEQ. ID NO. 145)	Ħ	Ħ No.	ID No.	ID NO.	. ID NO.	ID NO.	(SEQ. ID NO. 131)	ID NO.	(SEQ. ID NO. 127)	(SEQ. ID NO. 125)	(SEQ. ID NO. 123)	ID NO.	(SEQ. ID NO. 119)	(SEQ. ID NO. 117)	(SEQ. ID NO. 115)	'(SEQ. ID NO. 113)	. ID No.	(SEQ. ID NO. 109)	(SEG. ID NO. 107)
5' CAA CAT CCG CTC GTA TTC AA 3'	5' GGG GTC CGA GTC CAC AAC 3'	S' AAC AGT AAC TCT CGC CAT AGC C 3'	5' CTA GCT TAG CAC TGT CGC CC 3'	5' TGC AGT TAA CTT GTT GAA AGG A 3'	S'TGA GAG GAA GGC TCA CAC CT 3'	5' AGT COC COT TOT ATA GTG CC 3'	5' ACC AAT GCT ATC GGC TCG 3'	5' GAC CTG ATG AGA GCA AGC AC 3'	5' TCA GIT TAT TIT GGG CAT GIG 3'	5' CAA AAT GCA CAA GAA TOG AGG 3'	5' ACC CCC CAC GTC AGA GAG 3'	5' CGA CGC AGA ACT TAA ACA AG 3'	5' AAT TGT GTT GAT GAT TTG GGG 3'	S' COT TOT CIA ATC TTO CCT TGC'3'	S' TAG CAC GAC AGT TGT ATG CAT G 3'	5' GTG CCA CGT GGT ACC TIT G 3'	5' AGA AAT ACG GAA ACC CAC CC 3'	S' CGC CTC TAG CGA GAG CTA TG S'	S' TTG CAC ACA GCC AAA TAA GG 3'	S' GAA CCA TTC ATG TGC ATG TC 3'	5' GAT CGC ACG GGA GAG AGA G 3'	5' CCA TGA CCA GCA TCC ACT C 3'	S' GAC ACA CAT GTT CCT GCC AC 3'	S' GTG CTC TGC TCT AAG TGT GGG 3'	5' CIT TIC TIT CAG ATT GCG CC 3'	S' TTG TAA ACA AAT CGC ATG CG 3'	S' GTC TIT GTC ACC CGA TGG AC 3'
ID NO.	(SEG. ID NO. 160)	TO NO.	ID NO.	ID NO.	ID NO.	H NO.	ID NO.	ID NO.	ID NO.	ID NO.	ID NO.	ID NO.	년 평.	ID NO.	ID NO.	ID NO.	ID NO.	ID NO.	ID NO.	ID NO.	ID NO.	ID NO.	ID NO.	ID NO.	ID NO.	ID NO.	ID NO.
142	181	149	2	ĩ	192	152	139	250	130	126	<u>08</u>	131	171	191	28	>201	117	đ	6	135	2	181	173	38	199	120	127
ដ	GAimp	្ស	GA	9	Q.	t	CA,GA	υ	CA	٠ 1	ਹ	<u>1</u>	CT,CA	ij	១	CI,GI	Ď	GA	Ð	GA.	3	9	ij	GA	GA A	ជ	ij
50°C	ე° 0	ဝီ	8	<u>8</u> ဂိ	8 °	ဂိ	55 *C	5. 8	လ ဂ	60°C	ခြ ကိ	50°C	မိုင်	60 0°	ရ ဂိ	8 ဂီ	55 °C	ලි	8	50 °C	ي در	35 °C	55 °C	ე, ივ	وں ہ ڑ	55 °C	55 °C

WMS272	WMS271	WMS269	WMS268	WMS265	WMS264	WMS263	WMS261	WMS260	WMS259	WMS258	WMS257	WMS255	WMS251	WMS249	WMS248	WMS247	WMS245	WMS244	WM5242	WMS241	WMS238	WMS237	WMSZ34	WMS233	WMS232	WMS231	WMS228
S' TGC TCT TTO GCG AAT ATA TGG 3'	5' CAA GAT COT GGA GCC AGC 3'	S' TIGC ATA TAA ACA GTC ACA CAC CC 3'	5' AGG GGA TAT GTT GTC ACT CCA 3'	S' TIGIT TIGIC GIGA TIGIG TICA CITÀ TIT 3'	5' GAG AAA CAT GCC GAA CAA CA 3'	S' TOT GOO GTA AGT CGC CTC 3'	5' CTC CCT GTA CGC CTA AGG C 3'	5' GCC CCC TTG CAC AAA TC 3'	5' AGG GAA AAG ACA TCT TIT TTT TC 3'	S' GAT ÉGE TTE ATEITET ETÉ TET E J'	5' AGA GTG CAT GGT GGG ACG 3'	5' CAA CTG TAC GTA GGT TTC ATT GC 3'	5' CAA CTG GTT GCT ACA CAA GCA 3'	5" CAA ATG GAT CGA GAA AGG GA 3"	5' AGG ACT TEC GCA CCC TG 3'	5' GCA ATC TIT TIT CTG ACC ACG 3'	5' CAG CGC AGT TAG CTC GC 3'	5' GGC AGC TGA GGC AAT CTG 3'	5' TCC AAG GCA GTA GGC AGG 3'	5' TCT TCC AAC TAA AGC ATA GC 3'	5' TCG CTT CTA CCG CTC ACC 3'	5' GAA TCA CIT GTG AAG CAT CTG G 3'	5' GAG TCC TGA TOT GAA GCT GTT G 3'	5' TCA AAA CAT AAA TGI TCA TIG GA 3'	5' ATC TCA ACG GCA AGC CG 3'	S' AGC TCG GGA TGA AGC GTG 3'	S' TCA TAT GCA CCT CIT TCC TAG G 3'
(SEQ. ID NO. 217)	(SEQ. ID NO. 215)	(SEQ. ID NO. 213)	(SEQ. ID NO. 211)	(SEQ. ID NO. 209)	(SEQ. ID NO. 207)	TO NO.	(SEQ. ID NO. 203)	(SEQ. ID NO. 201)	(SEQ. ID NO. 199)	(SEQ. ID NO. 197)	(SEQ. ID NO. 195)	(SEQ. ID NO. 193)	(SEQ. ID NO. 191)	(SEQ. ID NO. 189)	(SEQ. ID NO. 187)	(SEQ. ID NO. 185)	(SEQ. ID NO. 183)	(SEQ. 1D NO. 181)	(SEQ. ID NO. 179)	(SEQ. ID NO. 177)	(SEQ. ID NO. 175)	(SEQ. ID NO. 173)	(SEQ. ID NO. 171)	(SEQ. ID NO. 169)	(SEQ. ID NO. 167)	(SEQ. ID NO. 165)	(SEQ. ID NO. 163)
S' GIT CAA AAC AAA TTA AAA GGC CCS' (SEQ.	S AGC TGC TAG CTT TTG GGA CA 3'	S'TIT GAG CTC CAA AGT GAG TTA GC 3'	S'TTA TOT GAT TOC OTA COT ACC C'3'	5' GAG TAC ACA TIT GGC CTC TGC 3'	5' GCA TGC ATG AGA ATA GGA ACT G 3'	S' OGT TTC ATT GCT TGC CCT AA 3'	5' CTC GCG CTA CTA GCC ATT G 3'	5' CGC AGC TAC AGG AGG CC3'	S' CGA CCG ACT TCG GGT TC 3'	S' GTA CAC GCC GTA GGC CC 3'	5' CCA AGA CGA TGC TGA AGT CA 3'	5' TCT GCC GTA AGT CGC CTC 3'	S' GGG ATG TOT GIT CCA TOT TAG 3'	S' CTG CCA TITI TIC TGG ATC TAC C.3'	5' TOO COT GOT CTA AAT GGA C 3'	5' ATG TOC ATG TCG GAC GC 3'	S' ATC TGT CCA TTC GAG CGC 3'	S' TITI GGA CAT TIC CCA GCG 3'	S' TOT TOT TOO CCT GTA TGC AT 3'	5' CTT CCA TGG ACT ACA TAC TAG C 3'	S' AGT OCC TTG CCG AGG TC 3'	S' CTG GAT GEA TCA CAT CCA AC 3'	S' CTC ATT GGG GTG TGT ACG TG 3'	S' TCA ACC GTG TGT AAT TIT GTC C 3'	5' CTG ATG CAA GCA ATC CAC C 3'	5' GAT CCG CCG CTG CGT TT 3'	5' GIG TGC CAC CIT TGA CGT C 3'
ID NO.		(SEQ. ID NO.	NO.		NO		. ID NO.	ID NO.		ID NO.	. ID NO.		NO.					ID NO.	ID NO.		. ID NO.	(SEQ. ID NO. 174)		ID NO.	. ID NO.		(SEQ. ID NO. 164)
140	162	>148	241	200	219	134	192	157	ğ	%	192	148	ĕ	Ξ	185	158	Ŧ	227	142	146	204	137	241	261	141	961	210
ξ	CT,GA	δ	GAinp	9	Ş	3	J.	GA	Ω.	Ω	9	C.	ξ	GAimp	ĊΑ	GA	J	CAlmp	GA	G.A	CT,GT,GGGT	ð	CT,CA	ij	GA	GAimp	CT,CA
																						.35 °C					

L

		4 5 5 4				રવર ર	
	WMS320 WMS321	WMS312 WMS313 WMS316 WMS316	WM\$299 WM\$301 WM\$302 WM\$304 WM\$311	WMS293 WMS294 WMS295 WMS296 WMS296 WMS297	WMS278 WMS281 WMS282 WMS284 WMS285 WMS291 WMS291	WMS273 WMS274 WMS275	
	S CGA GAT S CAA TGT	S' ATC GCA S' CCG CCC S' AGG AGC S' CAT GGA S' GGT TGC	5' ACT ACT 5' GAG GAG 5' GCA AGA 5' AGG AAA 5' TCA CGT	S' TAC TGG S' GGA TTG S' GTG AAG S' AAT TCA S' ATC GTC	S' GIT GCT S' CGG CCA S' TIG GCC S' AAT GAC S' ATG ACC S' CAT CCC	S' ATT GGA S' AAC TTG S' AAT TIT	
	5 CAA TOT GOA GAC GOT GAC 5 CAA TOT GOA GAC GOT GTG C 3'	S' ATC GCA TGA TGC ACG TAG AG 3' S' CCG CCC TCA TTA AGT TTC AC 3' S' AGG AGC TCC TCT GTG CCA C 3' S' CAT GGA CAT TTT ACC ACA AGA (3' S' GGT TGC TGT ACA AGT GTT CAC (5' ACT ACT TAG GCC TCC CGC C 3' 5' GAG GAG TAA GAC ACA TGC CC 3' 5' GCA AGA AGC AAC AGC AGT AAC 5' AGG AAA CAG AAA TAT CGC GG 3' 5' TCA CGT GGA AGA CGC TCC 3'	S' TAC TGG TTC ACA TTG GTG CG 3' S' GGA TTG GAG TTA AGA GAG AAC S' GTG AAG CAG ACC CAC AAC AC 3C S' AAT TCA ACC TAC TAT GCA ATG 3' S' ATC GTC ACG TAT TIT GCA ATG 3'	5' GIT GCT TCA TGA ACG CTC AA 3' 5' CGG CCA TAT TTC TGT AAG TAT GC 5' TTG GCC GTG TAA GGC AG 3' 5' AAT GAA AAA ACA CTT GCG TGG 3' 5' ATG ACC CTT CTG CCA AAC AC 3' 5' TCA CCG TGG TCA CCG AC 3'	S' ATT GGA CGG ACA GAT GCT TT 3' S' AAC TTG CAA AAC TGT TCT GA 3' S' AAT TTT CTT CCT CAC TTA TTC T S' ATT TGC CTG AAG AAA ATA TT 3'	
	S CAA GAT ACT ATG GAA GGT GAO G 3' S CAA TGT GOA GAC GGT GTG C 3'	S' ATC GCA TGA TGC ACG TAG AG 3' S' CCG CCC TCA TTA AGT TTC AC 3' S' AGG AGC TCC TCT GTG CCA C 3' S' CAT GGA CAT TTT ACC ACA AGA C 3' S' GGT TGC TGT ACA AGT GTT CAC G 3'	5' ACT ACT TAG GCC TCC CGC C 3' 5' GAG GAG TAA GAC ACA TGC CC 3' 5' GCA AGA AGC AAC AGC ACT AAC 3' 5' AGG AAA CAG AAA TAT CGC GG 3' 5' TCA CGT GGA AGA CGC TCC 3'	S' TAC TGG TTC ACA TTG GTG CG 3' S' GGA TTG GAG TTA AGA GAG AAC CG 3' S' GTG AAG CAG ACC CAC AAC AC 3' S' AAT TCA ACC TAC CAA TCT CTG 3' S' ATC GTC ACG TAT TIT GCA ATG 3'	5' GTT GCT TCA TGA ACG CTC AA3' 5' CGG CCA TAT TTC TGT AAG TAT GC J' 5' TTG GCC GTG TAA GGC AG J' 5' AAT GAA AAA ACA CTT GCG TGG J' 5' ATG ACC CTT CTG CCA AAC AC J' 5' CAT CCC TAC GCC ACT CTG C J' 5' TCA CCG TGG TCA CCG AC J'	T GCT TT 3' TTCT GA 3' TTA TTC T 3' A ATA TT 3'	
		(SEQ. (SEQ. (SEQ. (SEQ.	(SEQ. (SEQ. (SEQ. (SEQ.			Cass.	•
	NO.	ID NO. 2 ID NO. 2 ID NO. 2	H NO. 22	NO NO NO	H NO. 22 H NO. 22 H NO. 22 H NO. 22	ID NO. 2 ID NO. 2 ID NO. 2	
		261) \$1 263) \$1 265) \$1 267) \$1 269) \$1	251) 5.1 253) 5.6 255) 5.6 257) 5.7 259) 5.6		227) 5.0 229) 5.0 231) 5.1 233) 5.0 235) 5.7 237) 5.7 239) 5.0	219) 5". 221) 5". 223) 5". 225) 5".	
	\$ ATC TIT GCA AGG ATT GCC C 3" 5" TGT TGC ATG CGA TCA TGC 3"	S' ACA TGC ATG CCT ACC TAA TGG 3' S' TIT GAC AAG TAC ACG AGT CTG C3' S' TTC GGG ACT CTC TTC CCT G 3' S' TGC GTG TGG TCC ACC TC 3' S' CGG GTG CTG TGT GTA ATG AC 3'	S' TGA CCC ACT TGC AAT TCA TC 3' S' GTG GCT GGA GAT TCA GGT TC 3' S' CAG ATG CTC TTC TCT GCT GG 3' S' AGG ACT GTG GGG AAT GAA TG 3' S' CTA CGT GCA CCA CCA TTT TG 3'	S' TCG CCA TCA CTC GTT CAA G 3' S' GCA GAG TGA TCA ATG CCA GA J' S' GAC GGC TGC GAC GTA GAG 3' S' GCC TAA TAA ACT GAA AAC GAG 3' S' TGC GTA AGT CTA GCA TIT TCT G 3'	5' CTG CCC AAT TIT CTC CAC TC 3' 5' GCA GGT AAT GGC CGG AC 3' 5' TCT CAT TCA CAC ACA ACA CTA GC 3' 5' GCA CAT TIT TCA CTT TCG GG 3' 5' ATC GAC CGG GAT CTA GCC 3' 5' AAT GGT ATC TAT TCC GAC CCG 3' 5' CCA CCG AGC CGA TAA TGT AC 3'	5' AOC AGT GAG GAA GGG GAT C J' 5' TAT TTG AAG CGG TTT GAT TT J' 5' AAC AAA AAA TTA GGG CC J' 5' AAT TTC ACT GCA TAC ACA AG J'	
	ICA AGG A TG CGA T	AGTACA AC	JGA GAT 1 JGC TICT JGC ACCA C	CA CTC G	ATTITC ATTITC CA CAC A TITCA C TITCA C TITTCA C TITTCA C	AG GAA (AG CGG T AAA TTA (CT GCA T	
	C 1901 V.D.	CCTAA 1 CG AGT (TC CCT G CC TC 3' TA ATG A	ATTCAT CA GGT 1 CT GCT G AAT GAA :	TT CAA G	TC CACTY CG AC 3' CA ACA C TT TCG G TT GCC 1 CC GAC C CC GAC C	GGG GAT (TT GAT T GGG CC 3'	
	Ĭ ij	10.31 31.00.31 31.00.31	ជ <u>ី</u> ជី ជី ជី	CT G 3'	CJ' TA GC 3' GJ' CG 3'	Cy Cy	
	(SEQ.	(SEQ.)	(SEQ.)	(843) (843) (843) (843)	. 035) . 035) . 035) . 035) . 035)	(SEQ.)	
	급日	ON GI	ID NO. II NO. ON OIL ON OIL ON OIL ON OIL	888888	8 9 8 8 8 8 9	ID NO.	
	272) 274)	262) 264) 266) 268) 270)	252) 254) 256) 256) 260)	(942 (943 (947 (947)	230) 230) 232) 234) 236) 236)	220) 222) 224) 226)	
	>263 265	223 170	208 204 180 (340) 217	201 201 258 149	241 135 220 220 123 243 > 158	167 179 107	
	GT,GAinup	CT,GT		ci cy cy cy cy cy cy cy cy	GTimpGAimp GT GA GA GA CA	3 3 9 \$	
	8 5 6 0 0 0	្ ស្រួស្ស ព្រំព្រំព្រំព្	និងខិង ពីពីពីពីពី	អអ្នអអ្ ព័ពិព័ពិពី		ၾခန္႕ ကို ကို ကို	
·		_	- 14 (4 (4	.9			

WMS369 WMS371 WMS372	89CSWW 19CSWW	WMS359	WKS358	WMS357	95 ESWAY	WMS353	DS CSWA	WMS349	WMS346	WMS344	WMS342	I F CSWW	WMS340	ELESIMM	WMS337	WMS336	SEESWW	WMS334	WMSJJJ	WMS332	WMS330	WMS328	WMS325	WMS3ZŽ
5' CTG CAG GCC ATG ATG ATG 3' 5' GAC CAA GAT ATT CAA ACT GGC C3' 5' AAT AGA GCC CTG GGA CTG GG 3'	S' CCA TIT CAC CTA ATG CCT GC 3'	5' CTA ATT GCA ACA GGT CAT GGG 3'	5" AAA CAG CGG ATT TCA TCG AG 3"	5' TAT GGT CAA AGT TGG ACC TCG 3'	5' AGC GTT CTT GGG AAT TAG AGA 3'	S' CCA TOT TOA GTA GGT TCA GCC 3'	5' ACC TCA TCC ACA TGT TCT ACG 3'	5' GGC TTC CAG AAA ACA ACA GG J'	5' CAA GCA AGG TIT CGT TIT ATC C 3'	5' CAA GGA AÁT AGG CGG TAA CT 3'	5' TAT CCA GAG CAG ACG GAC G 3'	S' TIC AGT GGT AGC GGT CGA G J'	5' GCA ATC TIT TIT CIG ACC ACG 3'	S' AAT TIT CIT CCT CAC TIA TI J'	S' COT OTT COT COC TOA OTT AGC 3'	S' CCC TIT AAT CTC GCT CCC TC J'	5' COT ACT CCA CTC CAC ACG G 3'	5' AAT TTC AAA AAG GAG AGA GA 3'	5' GCC CGG TCA TGT AAA ACG 3'	5' AGC CAG CAA GTC ACC AAA AC 3'	5' TTG CTA TCC ATG TGC CAG AG 3'	5' GCA ATC CAC GAG AAG AGA GG 3'	5' TIT CIT CIG TCG TTC TCT TCC C 3'	5' TCA CAA AAT GAT TTC TCA TCC G I'
(SEQ.	(SEQ.	(SEQ:	•	(SEQ.	•	•	•	(SEQ.	(SEQ.	(SEQ.	(SEQ.	(SEQ.	(SEQ.	(SEQ.	(SEQ.	(SEQ.	(SEQ.	(SEQ.	(SEQ.	(SEQ.	(SEQ.	(SEQ.	-	(SEQ.
19 NO.	THE NO.	. ID NO.	ID NO.	ID NO.	IJ. No.	Ħ NO.	ID NO.	ID NO.	ID NO.	₩o.	ID NO.	IJ No.	ID NO.	ID NO.	ID NO.	ID NO.	ID NO.	ID NO.	ID NO.	ID NO.	ID NO.	ID NO.		u V
325) 327) 329)	321)	319)	317)	315)	313)	311)	309)	307)	305)	303)	(TOE	299)	297)	295)	293)	291)	289)	287)	285)	283)	281)	279)	277)	275)
5' ACC GTG GGT GTT GTG AGC 3' 5' AGC TCA GCT TGC TTG GTA CC 3' 5' GAA GGA CGA CAT TCC ACC TG 3'	S' ACA AAG TOG CAA AAG DAG ACA 3' S' AAT AAA ACC ATG AGC TCA CTT GC 3'	S' TAC TI'G TGT TCT GGG ACA ATG G 3'	S' TOO GOT GIT GIT OTG ATO TO 3'	5' AGG CTG CAG CTC TTC TTC AG 3'	5' CCA ATC AGC CTG CAA CAA C 3'	S' CTT GGC CAG AAG CTA CGA AC 3'	5' GCA TOO ATA GGA CGC CC 3'	S' ATC GGT GCG TAC CAT CCT AC 3'	S' GCA TOT OUT CCA TOT ACT GC 3'	5' ATT TGA GTC TGA AGT TTG CA 3'	5' GOT CTA GCT TCG ACG ACA CC 3'	5' CCG ACA TCT CAT GGA TCC AC 3'	5' ACG AGG CAA GAA CAC ACA TG 3'	5' AAA CGA ACA ACC ACT CAA TC 3'	S' TGC TAA CTG GCC TTT GCC 3'	S' GTC TCT TTC TCG TAC TTC CAG G 3'	5' CGG TCC AAG TGC TAC CTT TC 3'	5' AAC ATG TOT TIT TAG CTA TC 3'	S'TITI CAG TITI GCG TITA AGC TITI G J'	5' AGT GCT GGA AAG AGT AGT GAA GC 3'	5' ACA TGT TTC ATG CAG GTA GCC 3'	5' CAC AAA CTC TTG ACA TGT GCG 3'	5' TIT TTA COC GTC AAC GAC G 3'	5'TGC AGA AAA CCA ACA AGG G 3'
(SEQ.	(SEA.	(SEQ.	(SEQ.	(SEQ.	(SEQ.	(SEQ.	(SEQ.	(SEQ.	(SEC.	(SEQ.	(SEQ.	(SEQ.	(SEQ.	(SEQ.	(SEQ.	(SEO.	(SEQ.	(SEQ.	(SEQ.	(SEQ.	(SEQ.	(SEO.	(SEG.	(SEQ.
ID NO.		I No.	TO NO.	U NO.	D NO.	D No.	TO NO.	ID NO.	ID NO.	ID NO.	ID NO.	TO NO.	ID NO.		ID NO.	ID NO.	₩o.	ID NO.	ID NO.	ID MO.	ID NO.	ID NO.	ID NO.	ID NO.
	324)	320)	318)	316)	314)	312)	310)	308)	306)	304)	302)	300)	298)	296)	294)			288)	286)	284)	282)	280)	278)	276)
188 170 >329	249	217	£	푠	224	179	146	230	203	131	169	133 (150)	132	159	83	80	187 (225)	123	. 150	231	165	193	121	119
CZ GA	AT	CI,CITimp	GAimp	GA.	GA	GCGT,GT	ន	GA.	AT,GT	9	3	3	CA	ð	CT,CACT,CA	3	GA,GCGT	G _A	GA.	G¥	GIT	១	ជ	GA.
8 8 ဂီ ဂီ ဂီ	8 8 ဂီ င်	5 6 6	ಚಿ	3,55	55 °C.	ရှိ	55 °C	25 °C	55 °C	35 °C	25 °C	35 °C	ි රී	ئ. 9,0	55 °C	55 °C	ჯ ტ	ಕ ಗೆ	55 °C	8 0	23,55	25 °C	35 °C	55 °C

· ...)

)

6

WMS440	WMS437	WMS434	WMS429	WMS428	WMS427	WMS425	WWS415	WMS413	WM5412	1115WW	MMS410	WMS408	WMS403	WMS400	WMSJ97	WMS395	WMS193	WMS391	O6CSWM	WMS389	WMS388	WMSJ84	CBESMW	WMS382	WMS376	WMS375	WMSJ74
S' CCT ATO GTC TCC ATC ATG AGG 3'	S' GAT CAA GACTIT TOT ATCTCT C 3'	5' ATG AGT TCC GCC AAA GAA TG 3'	5' TTG TAC ATT AAG TTC CCA TTA 3'	5' CGA GGC AGC GAG GAT TT 3'	S' AAA CIT AGA ACT GTA ATT TCA GA 3'(SEQ.	5' GAG CCC ACA AGC TGG CA 3'	S' GAT CTC CCA TOT CCG CC 3'	S' TGC TTG TCT AGA TTG CTT GGG 3'	S' ATC AAC AAG GIT TGT GTG TTG G 3'	S' CCC ATA CGA TGA TGT GTT TCC 3'	5' GCT TGA GAC CGG CAC AGT 3'	5' TCG ATT TAT ITG GGC CAC TG 3'	5' CGA CAT TGG CTT CGG TG 3'	5' GTG CTG CCA CCA CTT GC 3'	S' TOT CAT OGA TTA TIT GGT CGG 3'	5' TAC AAC CGC AAG TAA TGC CA 3'	S'TCA TCT GCT ATT TGT GCT ACA 3'	5' ATA GCG AAG TCF CCC TAC TCC A J'	5' AAG TIT CAC ACA AGA TCT CTC C3'	5' ATC ATG TCG ATC TCC TTG ACG 3'	5' CTA CAA TTC GAA GGA GAG GGG 3'	S' TITI TCA TIG IGC CCI CI'A CI 3'	S' ACG CCA GIT GAT CCG TAA AC 3'	S' GTC AGA TAA CGC CGT CCA AT 3'	5' GGO CTA GAA AAC AGG AAG GC 3'	5' ATT GOC GAC TOT AGC ATA TAC G 3'	S' ATA GTO TGT TGC ATG CTG TGT G J' 🖔 (SEQ.
(SEQ.	(SEQ.	(SEQ.	(SEQ.	(SEQ.	(SEQ.	(SEQ.	(SEQ.	(SEO.	(SEO.	(SEQ.	(SEQ.	(SEQ.	(SEQ.	(SEQ.	(SEQ.	(SEQ.	(SEQ.	(SEQ.	(SEQ.	(SEQ.	(SEQ	(SEQ.	(SEO.	(SEQ.	(SEQ.	(SEQ.	(SEQ.
M CII	ID N	ID W	ID W	ID N	M GI	ID N	ID N	ID N	ID N	ID N	ID N	ID N	M GI	N CI	ID N	ID N	N GI	ID M	K GI	ID N	ID N	N GI	N GI	ID N	ID N	N GI	ID
NO. 385)	NO. 383)	NO. 381	NO. 379	NO. 377	NO. 375	NO. 373	NO. 371	NO. 369	NO. 367)	NO. 365	NO. 363	NO. 361)	NO . 359	NO. 357	NO. 355	No. 353)	NO. 351)	NO. 349	NO. 347)	NO. 345)	NO. 343)	NO. 341)	NO. 339)	NO. 337)	NO. 335	NO. 333	NO. 33
				_	'5) : 5	_	_	_	_	~	_	_	Ĭ	-		_	_	_	_	_	•		_			_	331)
S' TCA TGT CAA CTC AAG AAC ACG 3'	S' GAT GTC CAA CAG TTA GCT TA 3'	5' ACG AAA TAC ACA AGT GGG ACA 3'	5' TTT AAG GAC CTA CAT GAC AC 3'	5' TTC TCC ACT AGC CCC GC 3'	Y AGT GTG TTC ATT TGA CAG TT 3'	5' TCG TTC TCC CAA GGC TTG 3'	5' CGA CAG TCG TCA CTT GCC TA 3'	5' GAT COT CTC GTC CTT GGC A 3'	5' ATG AAA CGC GAC CTC CC 3'	5' CAA ACG GAA CAT GGT CCC J'	5' CGA GAC CTT GAG GGT CTA GA 3'	S' GTA TAA TTC GIT CAC AGC ACG C 3'	5' ATA AAA CAG TOC OGT CCA GG 3'	5' TGT AGG CAC TGC TTG GGA G 3'	5' CTG CAC TCT CGG TAT ACC AGC 3'	5' TAC CAA CAC CCT AGC CCT TG 3'	5' TCA AAT ACA CCA ATG TGC C 3'	5' ATG TGC ATG TCG GAC GC 3'	5' TGA CAA GTA CAC GAG TCT GC 3'	5' TGC CAT GCA CAT TAG CAG AT 3'	SI CAC CGC GTC AAC TAC TTA AGC 31	5' GCC AAG TIT CIT AGC TAG TTA A 3'	5' GAC ATC AAT AAC CGT GGA TGG 3'	S' CTA CGT GCA CCA CCA TTT TG 3'	S' TCT CCC GGA GGG TAG GAG 3'	5' GGG ATG TCT GTT CCA TCT TAG C 3'	STITCT AAT TAG CGT TGG CTG CC 31
(SEQ	(SEQ	(SEQ	(SEQ	(SEQ	(SEQ.	(SEQ	(SEQ	(SEO	(SEQ.	(SEQ	(SEQ	(SEQ	(SEQ	(SEQ	(SEO	(SEO	(SEO	(SE0	(SEO.	0E8)	(SEQ.	(SEQ	(១២១.	(SED.	(SEQ	(SEO	(SEO
. ID]	. ID 1		, H	ij	H	IJ	IJ	H	IJ	Ţ	ij	ID	IJ	ID	ដ	ij	ID	ID	Ħ	ij	ij	ij	IJ	ID	. 10 1	. ID 1	Ib
•	•	NO. 3	•	•	NO. 3	-	•	•	NO. 31	•	•	•	NO. 31	٠.	•	•			•		MO. 31	•	NO. 31	•	NO. 3:	-	•
86)	84)	382)	80)	378)	76)	37L)	72)	70)	368)	366)	(40	62)	.0)	58)	56)	51)	352)	50)	348)	(9	344)	(2	340)	38)	336)	334)	32)
112	109	216	221 (290)	¥3	215	· ¥43	<u>=</u>	¥.	121	₩	334	176	ដូរ	139	179	147	107	150	143	130	žã	20.	195	115	147	%	213
3																											
55 °C	ۍ د د	55 °C	50 °C	8 ဂိ	Sp. oc	ဂိ	55 °C	ე ი	55 °C	55 °C	ss °C	55 °C	55 C	8 0	ჯ ი	8 0	ದ್ದಿ	55 °C	55 °C	မ ဂိ	မ ဂိ	55 °C	ကို အ	ള ഹ്	နှင့် ကိ	3° 88	ဗ က

							-						
25.55	CTimp	129	(244	NO.	į. ID	(SEQ	5' AGG CAT GGA TAG AGG GGC 3'	141) 5	D MO.	EQ. ID	3' (SEQ	S' TCT COC TOT GAA ATC CTA TIT C 3'	WMS540
ေ	GTimp	Ē	440)	NO.). II	r (SEQ	S' GIT GCA TOT ATA COT TAA GCG G 3'	439) s	D NO.	SEQ. ID	s)	S' GCA TITI CGO OTO AAC CC 3'	8ESSWM
န်	CA, TA	200	438)	No.	H	ers)	S' GCC ACT TIT GIG TCG TITC CT 3'	437) S	D NO.	(SEQ. ID	Ī	5' ACA TAA TGC TTC CTG TGC ACC 3'	WMS537
<u>පි</u> ෆ්	CT, CA	147	436)	NO.	₹. ID	(SEQ	5' GTT GCT TTA GGG GAA AAG CC 3'	435) 5	D NO.	SEQ. I	ŝ	5' AAG GCG AAT CAA ACG GAA TA 3'	WMS533
8.0	g	142	434)	NO.	•	(SEQ	S' TOA CTO GOA CTO GAT AGG C 3'	433) 5	D NO.	(SEQ. ID	s)	5' ACT OCG TOT GCC TAC AAT TO 3'	WMS532
55 °C	ð	280	432)	NO.	•	(SEQ	S' TCA ACT TOT TOO CCT CCA TC 3'	431 } S	D NO.	(SEQ. ID	(s	5' AAA TAG GAC AAC CCA CGG C 3'	UESSMA
55 °C	ζ	<u>8</u>	430)	NO.	•	(SEQ	5' CAG GOT GOT GCA TGC AT 3'	429) 5	D NO.	(SEQ. I	(8)	S' AAT CAC AAC AAG GCG TGA CA 3'	8155WM
රි	GTimp	1 2	428)	NO.	•	(820,	5' CCT TCC TAG TAA GTG TGC CTC A 3'	427) 5	D NO.	(SEQ. I	(S	5' AAC ACA ATG GCA AAT GCA GA 3'	WMS515
(9°C)	δ	Ŧ	426)	NO.	•	(SEQ	5' GGT CTG TTC ATG CCA CAT TG 3'	425) 5	D NO.	(SEQ. ID	•	S' ATC COT AGC ACC TAC TOG TCA J	WMS513
2.09	Ħ	Ē	(424)	No.	٠.	(SEQ	5' GAA CAT GAG CAG TIT GGC AC 3'	423) 5	D NO.	SEQ. ID	ŝ	5' AGC CAC CAT CAG CAA AAA TT 3'	WMS512
0°°C	ኔ	E	422)	NO.	TD	(SEQ	5' TCC ACA AAC AAG TAG CGC C 3'	\$21) S	D NO.	(SEQ. I	(s	5' GGC TAT CTC TGG CGC TAA AA J'	WMS501
දි	Q.	145	420)	. O	•	(SEO	S' GGG DAG TOG AAA CTG CAT AA 3'	419) 5	D NO.	(SEQ. ID		5' ACT TOT ATG CTC CAT TGA TTG G 3'	WMS499
55 °C	GTimp	>106	418)	No.	₹. ID	(SEQ	S' CCG AAA GTT GGG TGA TAT AC J'	417) 5	D NO.	(SEQ. ID	(s)	5' GTA GTG AAG ACA AGG GCA TT 3'	WMS497
8 0	QA A	168	416)	ĦO.	н	(SEQ	S' TGC TTC TGG TGT TCC TTC G 3'	415) 5	D NO.	(SEQ. ID		5' GAG AGC CTC GCG AAA TAT AGG 3'	WMS495
0°0	Ç	198	414)	No.	•	(SEQ	S' TTC CTG GAG CTG TCT GGC 3'	413) 5	D NO.	EQ. ID	G3'(SEQ	5' ATT GAA CAG GAA GAC ATC AGG G	PEFSWM
55 °C	ដ	145	412)	NO.	•	(SEQ	5' AGT TCC GGT CAT GGC TAG G 3'	4117 5	D NO.	(SEQ. ID	ŝ	5' ACA TEG CTC TTC ACA AAC CC3'	WMS484
8	CT, CA	88	(014	NO.	•	(SEQ	5' CCG AAT TGT CCG CCA TAG J'	409) 5	D NO.	eq. id	3' (SEQ	S' TOC TOC TAC TTG TAC AGA GGA C	08FSWM
8.0	GAimp	¥.	408)	NO.). ID	(SEQ	S' TTO CTG GIA GCT TCA ATC CC 3'	407) S'	D NO.	(SEQ. ID	<u>ښ</u>	5' ATG GGT TCG TAC TAA CAT CAG C	WMS476
55 °C	GTimp	220	106)	NO.	•	(SEQ	S' CAC CCC CIT GIT GGT CAC 3'	405) s	D NO.	SEQ. ID	(8)	5' TCA TAC GGG TAT GGT TGG AC 3'	WMS473
<u>ဧ</u> ဂီ	ç	149	404)	NO.	. ID	(SEQ	5' GCT TGC AAG TTC CAT TTT GC 3'	403) 5	D NO.	SEQ. ID	(s)	5' CGG CCC TAT CAT GGC TG 3'	WMS471
6,0	3	>156	402)	No.	•	(SEQ.	5' CGA TAA CCA CTC ATC CAC ACC 3'	101) S	D NO.	SEQ. ID	_	5' CAA CTC AGT GCT CAC ACA ACG 3'	WMS469
່ ເ ຮ ິ ດ	GA	>138	100)	NO.	•	(SEQ	5' AGC TTC TCT GAC CAA CTT CTC G 3'	399) 5	D NO.	SEQ. ID	_	5' ATG GAG TGG TCA CAC TIT GAA 3'	WMS459
. 60 °C	CA	£13	398)	NO.	. ID	(SEQ.	S' TTC GCA ATO TTG ATT TOG C 3'	397) 5	NO.	EQ. ID	3' (S)	5' AAT GGC AAT TGG AAG ACA TAG C 3' (SEQ	WMS458
55 °C	GA	132	396)	NO.	•	(SEQ	5' TGC TCT CTC TGA ACC TGA AGC 3'	395) 5'	NO.	ID	3.(SE	5' TCT GAA CAT TAC ACA ACC CTG A 3'(SEQ.	WMS456
55 °C	CTInup	151	394)	NO.	•	(SEC	' ACG GAG AGC AAC CTG CC 3'	νį	No. 393)	. ID NO.	(SEQ.	5' ATT CGG TTC GCT AGC TAC CA 3'	WMS455
5.09	GA	123	392)	NO.	•	(SEQ	5' CAC ATG GCA TCA CAT TTG TG 3'		NO. 391	ij	(SEQ	5' AAA CCA TAT TGG GAG GAA AGG J(SEQ.	8HSWW
55 °C	đ	. 192	390)	NO.	. ID	(SEO.	5' CCT TAA CAC TTG CTG GTA GTG A 3'	_	NO. 389	ΙĐ	OES)	STIT GIT GGG GGT TAG GAT TAG 3' (SEQ.	WMS445
55 °C	CAGA	134	388)	NO.		(SEO	5' CCA TGA TTT ATA AAT TCC ACC 3'	_	NO. 387	IJ	(SEQ.	5' GGG TCT TCA TCC GGA ACT CT 3'	WMS443
							•••						

₩ SJ.	WMS588	WMS583	WMS582	WMS577	WMS573	WMS570	WMS569	WMS566	. WMS565	WMS554	WMS550	WMS344
"CS Weizensorte 'Chinese Spring'	٠	-	•		-							
hinese Sp	S' GAT CCC CAA TTG CAT GIT GI	S' TTC ACA CCC AAC CAA TAG CA 3'	5' AAG CAC TAC GAA AAT ATG AC 3'	5' ATG GCA TAA TIT GGT GAA ATT G3'(SEQ. ID NO. 459)	5' AAG AGA TAA CAT GCA AGA AA 3'	S' TCG CCT TIT ACA GTC GGC 3'	5' GGA AAC TTA TTG ATT GAA AT 3'	S' TCT GTC TAC CCA TGG GAT TTG 3'	S' OCC TCA GAT ATG CCT ACCTAG G N(SEQ. ID NO. 449)	S' TGC CCA CAA CGG AAC TTG 3'	S' CCC ACA AGA ACC TIT GAA GA 3'	STAG AATTCH TIA TOG GOT CTO CET (SEW. ID NOT 4437 S AOO ATTCCA AIC CIT CAA AATTE (SEW.
Ting.	CAATI	CCC */	CTAC G	TAAT	A TAA C	OV LLL.	רו אזרט	TACCC	GAT A	CAAC	AGA A	1011
	GCAT	C CAA 7	M AAT	T GGT (AT GCA	A GTC G	GATT	A TGG C	GCC1 /	G AAC	CTT	A 1000
	3T G 3'	TAG CA 3	ATG AC	JAA ATT	AGA AA	a C J	JAA AT 3	ATTIG	CCTAG	103	JAA GA 3	201 010
	ES.)	_	' (SEQ.	G3'(SE		(SE	· (SEQ.	3' (SE	G 31(SE	(SEQ		(7)(0)
	(SEQ. ID NO. 465) SCIT GCA ACT GGG GGA CACJ	(SEQ. ID NO. 463) STOTAGG CAGACA CAT GCC TG3		Q. ID	(SEQ. ID NO. 457) S'TTC AAA TAT GTG GGA ACT AC 3'	(SEQ. ID NO. 455) 5'ATO GOT ACC TGA GAG CCA AA 3'	•	(SEQ. ID NO. 451)	a. ID	a. ID	(SEQ. ID NO. 445) S'CATTGTGTGTGCAAGGCACS	٠.
	NO.	NO.	ID NO. 461)	No.	NO.	NO. 1	ID No. 453)	NO.	NO. 1	ID NO. 147)	NO. 1	, N
	165)	463)	(T94	(65 h	457)	(55	453)	(154	(64	147)	145)	++0/
• • •	SCII	STCI	S'TCT	STOT	STTC	5' ATO	5' TCA	5. C.1.0	5' ACT	5º GCA	5' CAT	200
	GCA AC	AG C.A	TAA GG	TTCAA	AAA TA	SOLV	ATT	oct to	GAGTI	ACC AC	ावा वा	3.7
	T GGG	GACA	Gard	9000	T OTG	CTGA	G ACA	O AGG	y acc	CAAG	a Tac /	5
	GGA CA	CATO	TA TC	ACT	3GA AC	OAG CC	JAA GA	FAA GC	CTG AG	CAC A	MG GC	5
	C3'	CTG 3	4 T'A 3'	CTATT	TAC 3	A AA 3	ינ דד א	A AC 3	C CA 3'	Y CLI 3,	A C3'	7 7 7 1
	(SE)	(SEC	(SEC	3' (SEC	7) S'TTC AAA TAT OTG GGA ACT AC 3' (SEQ. I	(SEC	(SEC	(SEC	(SEC	(SEC	(SEC	(0.00)
	Q. ID	. ID). ID). ID	, ID NO.	. HD	. ED	. ID	. HD	ij	ID	
	-											
	(994	(404	162)	(09	458)	156)	454	152)	\$50)	(844	146)	
	102	165	151	133	212	. Li	134	130	142	160	150	Š
	3	δ	ξ	CAT	ζ	CI, C	ব	CAT	Ç	CT,G	J. C	£ . 5
				>	ţ	4		>	٠.	Timp	4	2010
٠.	ို့ မ	8	80	55.	S	8	47	ક	8	69	55	į